

Application No. 10/024,432

Docket No. AVE-003RCE2

REMARKS

Claims 1-23 are pending in the application, of which claims 1, 16 and 21 are independent. Claims 1-23 were rejected under 35 U.S.C. §103(a) as obvious over U.S. Patent No. 5,848,415 (hereinafter "Guck") in view of United States Patent No. 6,857,102 (hereinafter "Bickmore"). Applicants respectfully traverse the rejections.

I. Summary of Claimed Invention

The claimed invention provides a mobile content framework (MCF) that facilitates abstracting content and behavior from the rendering of content on a requesting device. Content is abstracted in a manner specifically tailored to take into account the limited resources of certain devices such as mobile devices. The abstraction process allows the distribution of uniform content to multiple types of requesting devices. Content is generated specifically for each device, both from a display and attributed standpoint and a content navigation standpoint. The MCF includes a generic markup language, referred to as Wireless Abstract XML (hereinafter "WAX") that is extendible and can be translated into a variety of different mobile device markup languages. Content is first translated into WAX from the original language of the content provider, or is created in WAX originally, and then converted into a device appropriate language for a requesting mobile device. WAX is designed to enable the content developer to describe content at a more abstract level than that used in individual protocols. The greater level of abstraction enables the subsequent conversion of WAX into the languages used by the requesting mobile devices such as WML, HDML and HTML. Typical markup languages focus on how content is rendered on the device, while WAX focuses on generic but smart objects whose transformation is tailored to specific devices. During this transformation process, the MCF ensures the best type and length of text is used, the best type and size of image is used, and that the content is well suited and customized for the device attributes. The customization process uses device attribute records stored in databases to choose appropriate content for the requesting device.

Application No. 10/024,432

Docket No. AVE-003RCE2

II. Summary of Guck

Guck discusses the use of a transmission protocol and application format conversion process that may be utilized with an object database. Requests from a client device or a document cause the requested document to be retrieved, and if necessary, converted to a transmission protocol and application format required or requested for the requesting client device. The conversion process uses many different converter objects to perform the required transformations. In the event a single converter for the required transformation cannot be identified, the system of Guck allows multiple converters to be chained together to produce the result as part of a multi-stage process.

III. Summary of the Bickmore

Bickmore discusses a re-authoring system to change a document originally designed for display on a desktop computer screen so that it can be displayed on a smaller display screen. Typical applications are for PDA or cellular telephone devices. A document and re-authoring parameters such as display screen size default font, etc., are entered into the re-authoring system. The system then converts the document into a number of pages. Each page being fully displayable with minimal scrolling of the display screen.

IV. Argument

Claims 1-23 were rejected under 35 U.S.C. §103(a) as obvious over Guck in view of Bickmore. Applicants respectfully request that the Examiner reconsider the rejection in light of the following discussion, and pass the claims to allowance.

A. Claims 1, 16 and 21

Claim 1 recites,

1. In a network having an electronic device, a method, comprising the steps of:

Application No. 10/024,432

Docket No. AVE-003RCE2

providing content in a generic markup language, said content in a generic markup language susceptible to being converted to a plurality of markup languages capable of being displayed to a user of a mobile device interfaced with said network;

providing at least one registry containing device information of multiple types of mobile devices, said information including device attributes for each type of mobile device;

receiving a request for said content from a user of mobile device interfaced with said network;

retrieving said device information from said at least one registry; and

converting said content in a generic markup language into device-specific content in response to said request, said device-specific content being customized based upon at least one device attribute in the device information retrieved from the at least one registry, *the at least one device attribute including a least one attribute from the group of color depth attribute, memory attribute, storage capacity attribute and operating system of the mobile device attribute.*

The Examiner recognized that Guck does not disclose the at least one device attribute including at least one attribute from the group of color depth attribute, memory attribute, storage capacity attribute, and operating system of the mobile device attribute. (Office Action at page 4.) Instead, the Examiner contends that Bickmore discloses this element, citing Bickmore at col. 3, lines 65-67 and col. 4, lines 22-23. Applicants respectfully disagree.

In the first example cited by the Examiner, Bickmore states "[t]his invention separately provides systems and methods that automatically transform a document into a plurality of linked subdocuments, where each subdocument requires less display area." This example does not disclose *the at least one device attribute including at least one attribute from the group of a color depth attribute, memory attribute, storage capacity attribute and operating system of the mobile device attribute* because it does not rely on one of the listed attributes. The Examiner contends that display area is a color attribute. (Office Action at page 4.) The display area referred to is calculated based on a screen's size and resolution, and the device's font size. (Bickmore at col. 13, lines 8-16.) Thus, color is not taken into consideration.

Application No. 10/024,432

Docket No. AVE-003RCE2

In the second example cited by the Examiner, Bickmore states "[t]his invention separately provides systems and methods that filter a document to extract a described portion based on a pre-defined script." The example describes how content can be eliminated so that only information relevant to a user is presented, thus reducing the amount of information that needs to be displayed. (Bickmore at col. 23, lines 46-59.) This method is used when the user wants very specific information, instead of an entire page (Bickmore at col. 23, lines 51-54.) More specifically, this method is directed to the filtering needs of the user, and not the *color depth attributes, memory attributes, storage capacity attributes, or operating system attributes* of the device.

Claims 16 and 21 both recite: "*the at least one device attribute including at least one attribute from the group of a color depth attribute, memory attribute, storage capacity attribute, and operating system of the mobile device attribute.*" For the same reasons discussed with regard to claim 1, the cited combination of Guck and Bickmore also do not disclose all of the elements of claims 16 and 21.

Guck and Bickmore, alone or in combination, do not disclose each and every element of claims 1, 16 and 21. Therefore, Applicants respectfully request that the Examiner re-consider and withdraw the 35 U.S.C. §103(a) rejection of claims 1, 16 and 21.

B. Claims 2-15, 17-20 and 22-23

Claims 2-15 and 23 depend on claim 1 and, as such, include each element of claim 1. Claims 17-21 depend on claim 16 and, as such, include each element of claim 16. Claim 22 depends on claim 21 and, as such, includes each element of claim 21.

In light of the comments with respect to claim 1, Guck and Bickmore, alone or in combination, do not disclose each and every element of claims 2-15, 17-20 and 22-23. Therefore, Applicants respectfully request that the Examiner and reconsider and withdraw the 35 U.S.C. §103(a) rejection of claims 2-15, 17-20 and 22-23.

Application No. 10/024,432

Docket No. AVE-003RCE2

RECEIVED
CENTRAL FAX CENTER

FEB 19 2008

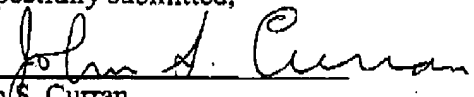
CONCLUSION

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Dated: February 19, 2008

Respectfully submitted,

By


John S. Curran

Registration No. 50,445

LAHIVE & COCKFIELD, LLP

One Post Office Square

Boston, Massachusetts 02109-2127

(617) 227-7400 (Tel.)

(617) 742-4214 (Fax)

Attorney for Applicants